

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



A281.12
F312

UNITED STATES
DEPARTMENT OF AGRICULTURE
LIBRARY



BOOK NUMBER A281.12
932726 F312

CONCEPTS, PRINCIPLES, AND CONSIDERATIONS
FOR THE MANAGEMENT CONSULTANT

1. Farm families want to accomplish different things.
2. In farming, many phases of the farm business and family living are inter-related.
3. Successful planning and the solving of problems must be done by the farm family.
4. Families have different farm, capital, labor, and management resources.
5. The skill of operators varies with different enterprises.
6. Specialization on, say two, livestock enterprises, rather than four, to increase management efficiency, and attain cost economies of size.
7. The best farm plan is different on every farm because of differences in farm resources, location, management capacity and the family situation. Because of changes in such things as age, health, values, capital strength, the market, costs, etc., the plan must constantly be adjusted.
8. The costs and returns from various enterprises differ, as well as the waiting period and market outlets needed. All enterprises are not suited to every farm and must be carefully selected to fit the resources and needs of the family.

Table 1. Comparative returns from feed and labor and capital requirements for various livestock classes 1/

Item	: Necessary : returns <u>2/</u> : (1944-53)	: Necessary : returns <u>3/</u> : (1940-48)	: Returns <u>4/</u> : per hour : labor	: Capital require- : ments per man : work unit
Poultry	: \$1.77	\$1.75	Low	Low
Dairy	: 2.04	1.67	Low	Low
Beef breeding	: 1.61	1.43	Low	Medium
Sheep	: 1.75	1.43	Low	Medium
Hogs	: 1.35	1.23	High	Medium
Feeder cattle	: 1.37	1.19	High	High

1/ Taken from Better Farming and Better Living for Indiana Farm Families.

2/ Returns per dollar worth of feed fed to cover all costs - Corn Belt Cost Studies.

3/ Returns required from each class of livestock for each dollars worth of feed fed to show equal efficiency. Source: Enterprise cost accounting in the Corn Belt.

4/ Source: Illinois Cost Accounts Champaign-Piatt Counties 1933-42 (Table 28).

9. The amount and kind of risk that families must bear is related to the enterprises selected and the size of business attained.

Prepared by J. B. Claar, Chief, Farm Management and Production Economics Branch, Federal Extension Service, USDA, for North Central Regional Summer School at Wisconsin, June 1957.

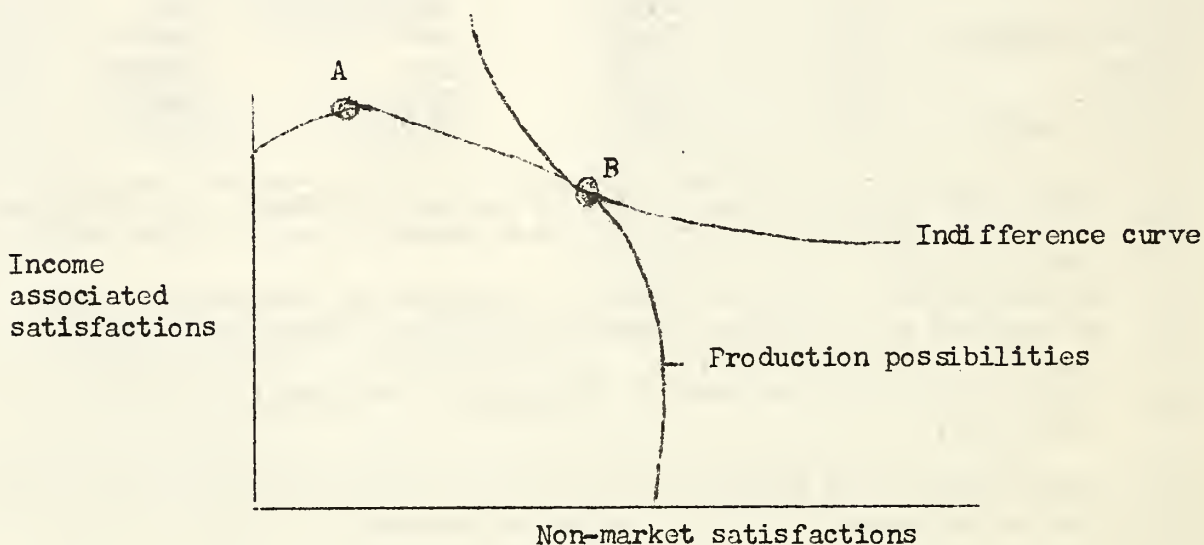
Table 2. Based on the 20 years, 1933-1952, the chances that the income will just pay or fail to pay the feed bill are: 1/

Dairy-cow herds -- less than 1 in 100
Beef-cow herds -- 20 in 100
Feeder cattle bought -- 11 in 100
Native sheep raised -- 20 in 100
Feeder sheep bought -- 27 in 100
Hogs -- 3 in 100
Poultry -- 2 in 100

1/ Taken from Illinois Farm and Home Development Reference Book.

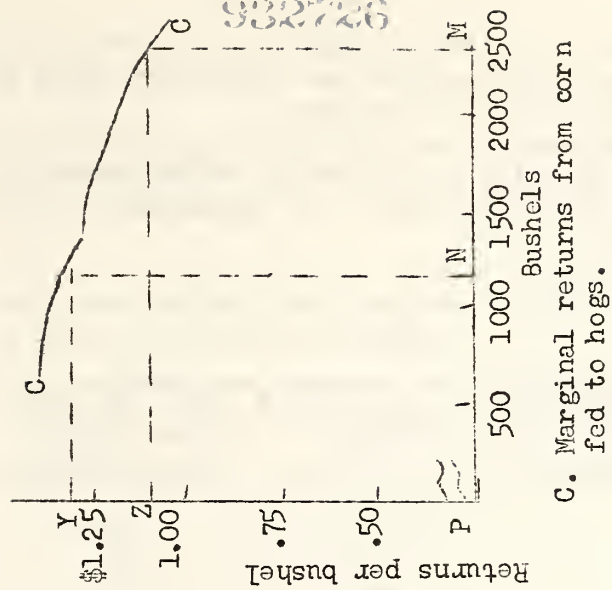
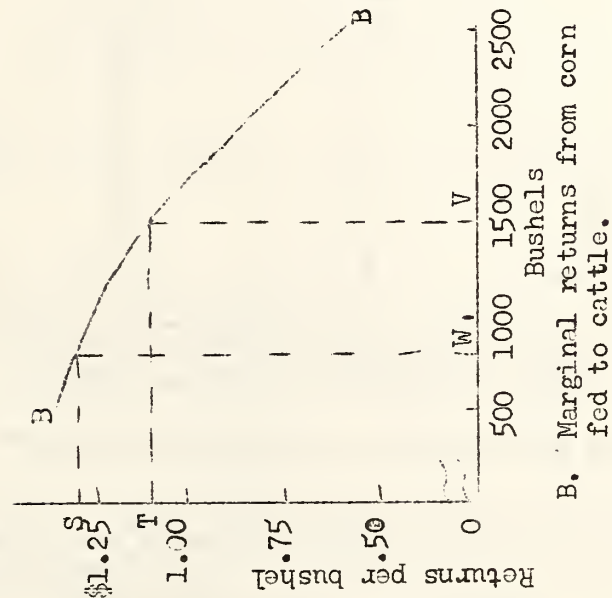
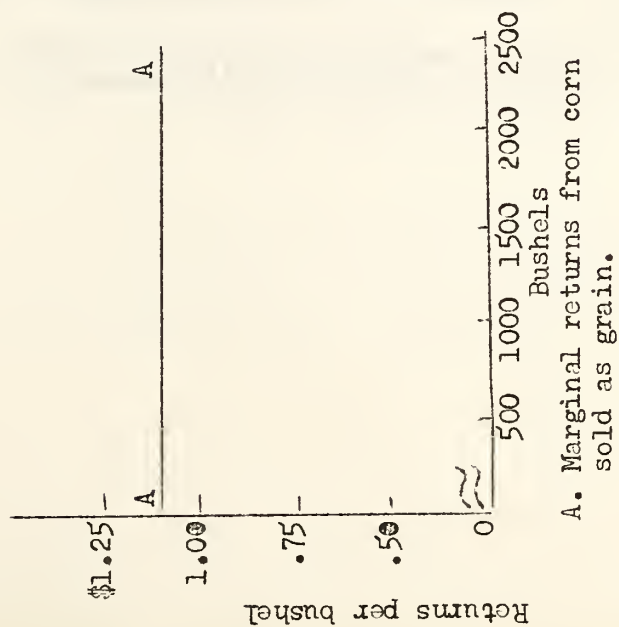
10. Although the price at which a farmer can sell his product is sensitive to over-all supply and demand, the amount the individual farmer sells rarely affects his price.
11. The high profit farm unit is attained when the return to the last units of available resources are equal. Distribute funds in their highest return use until funds are all gone. If capital is not limited inputs will be carried in each alternative to the point where the value of the added output is equal to the added cost. (See Figure 1.)
To attain the most desirable farm organization various farm organizations must be related to family needs and desires until the highest level of family satisfaction is reached.

Figure 2



Point A would be the high profit point but point B would be the most desirable farm organization from the family's point of view. At point B the family would be compensated for the loss in income by the attainment of more non-market satisfaction.

Figure 1. The Principle of Equi-marginal Returns ^{1/}



^{1/} H. C. M. Case and P. E. Johnston, Principles of Farm Management.

12. When successive units of input are added to a fixed unit the added physical output tends to increase rapidly at first then to increase more slowly and to finally decline.
13. The best application or feeding rate, or high profit point, can be determined by applying prices to the added physical increases in input and output. The high profit rate is attained when the added cost and return are equal.

Table 3. Returns from varying inputs of labor and capital on an acre of land in corn ^{1/}

Inputs of labor and capital 2/	Additional yield	Value of additional yield at \$1 per bushel	Value at \$1.50 per bushel
1	5	5	\$ 7.50
2	8	8	12.00
3	14	14	21.00
4	12	12	18.00
5	11	11	16.50
6	10	10	15.00
7	9	9	13.50
8	8	8	12.00
9	5	5	7.50
10	4	4	6.00
11	3	3	4.50
12	-3	-3	-4.50

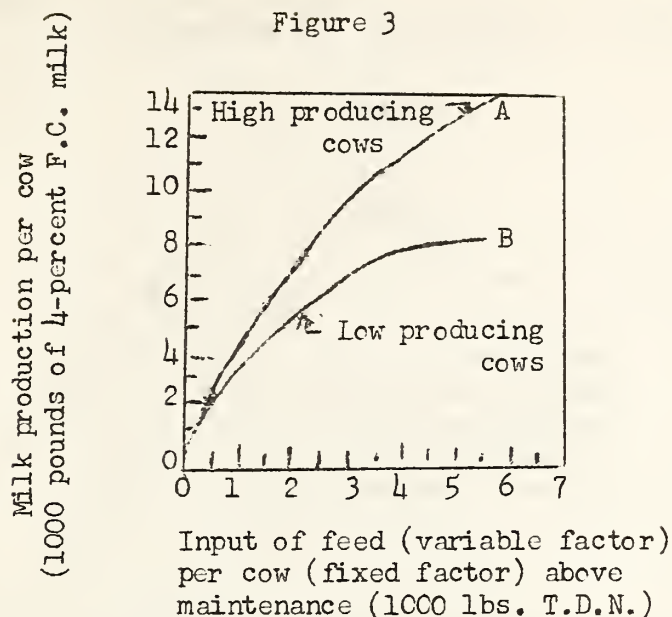
^{1/} Adapted from Case and Johnston, Table 9.

^{2/} Labor and capital cost \$6 per unit.

Where is the high-profit production point?

14. If capital is not limited the intensity of a particular input should be carried to the point where added costs and returns are equal. However, if capital is limited spend it on the best-paying alternatives starting with the high profit one and continuing until it is all gone. (See Table 3.)
15. Different technical units have different responses as inputs are added because of their varying capacity to produce.

Figure 3

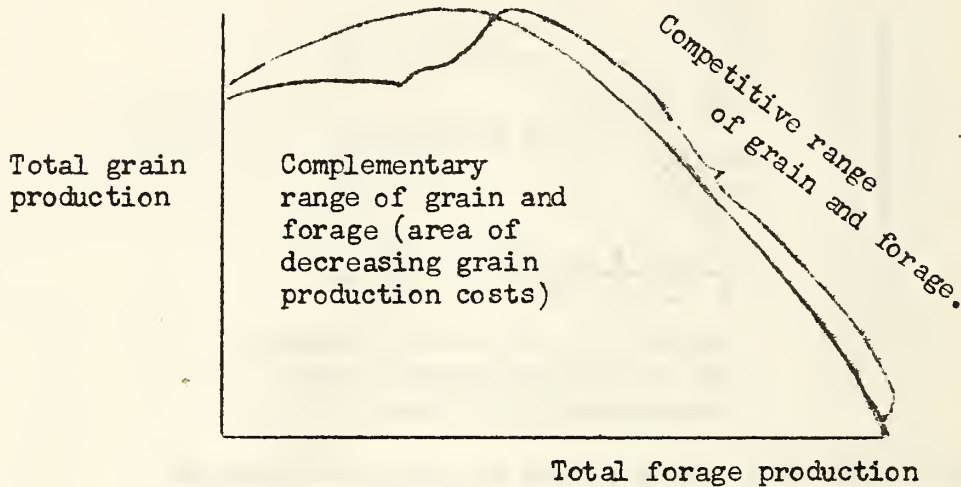


Feed input-milk output curves for cows of different inherent productivities (Source: USDA Tech. Bul. 815).

16. Farmers operate at different points on the response curve. Because of this, one farmer might expect a very large return from using more inputs, another very little return. (See Table 3.)
17. It is possible to increase profit by substituting one cost item for another in producing a given amount of product. Milk can be produced by all forage on all grain with output unchanged. Substitute one cost item for another as long as the cost of the item being substituted is less than the cost of the item replaced. At other times, production cannot be increased unless other items are increased in quantity. Products may also substitute for each other. With cost unchanged substitute one product for another as long as the value of the added product is greater than the product foregone. (See Figure 4.)
18. The introduction of new technology frequently frees some resources. The value of the use of this free resource in other business activities, or in leisure, must be weighed against the additional cost of the new technology. I.e., the addition of a barn cleaner frees 300 hours of labor per year and has an annual cost of \$350. The value of the freed time must be considered against this cost.
19. The flexibility or alternate uses to which a production factor can be put must be considered. I.e., a farmer may be faced with the decision to build a stanchion or loafing area type of dairy barn. The stanchion barn cannot be as easily converted into use for other livestock as the loafing area type. This must be considered in the decision.

20. The production of two or more products may reinforce or complement each other, or compete with each other for resources.

Figure 4. 1/



1/ From Minnesota Farm and Home Development No. 2,
County Agents Training Program.

21. When changes are made in the farm business, some costs remain fixed while others change. In considering particular changes only those costs that change need to be considered. I.e., in deciding whether to feed more grain to a dairy cow, only the costs that change need to be taken into account, not the entire costs of keeping the dairy cow.
22. As the size of a farm or enterprise is expanded, the cost per acre or per animal, as well as per unit of product, tends to decline as long as management has the capacity to effectively use the inputs.
23. Some enterprises or activities of the farm business take longer to produce a return, thus creating a cost of waiting. I.e., poultry vs a beef cow herd.
24. The prices of products vary between years and within the year as demand and supply change.
25. The form and quality of the product that consumers want cause price differentials.

